ABOUT THE CENTER

In 2013, Tsinghua University and the University of Amsterdam (UvA) instituted a joint research centre for logic (JRC), based on a long-standing history of cooperation. The mission of the centre is to create an active interface in research and education between the Institute for Logic, Language and Computation (ILLC) at the UvA and the Logic Group at Tsinghua and collaborators elsewhere in China, in a collegial spirit of public service.

STATEMENT FROM THE DIRECTORS

After its founding events, and an opening ceremony of the JRC at Tsinghua in July 2014, the JRC has started its regular activities in 2015. Progress continues in three research projects, as does education in pure and applied logic, our graduate program is expanding, and several academic events have taken place. This report gives some basic information. Further details can be found at our website: http://www.tsinghualogic.net/JRC

RESEARCH PROJECTS

JRC administers three programs involving UvA and Tsinghua participants. The following list contains main active participants, key publications, and funding sources in 2016:

Logic and Agency

Goal: Investigation of reasoning agents in complex informational social settings.

Core group: Alexandru Baltag (ILLC), Johan van Benthem (ILLC), Jan van Eijck (ILLC), Fenrong Liu (Tsinghua), Jeremy Seligman (Auckland), Sonja Smets (ILLC), Kaile Su (Griffith).

Key publications:
4. Chenwei Shi and Sonja Smets, Beliefs Supported by Arguments. Proc's Chinese Conference on Logic and Argumentation (CLAR 2016), CEUR proceedings, Hangzhou

Highlight: ILLC Research seminar Logics for Social Networks, Johan van Benthem and Fenrong Liu, January 2016. Results include a Springer best student paper at ESSLLI 2016, Bolzano-Bozen, Italy, by Anthia Solaki, Zoi Terzopoulou, and Bonan Zhao.
Funding:
1. KNAW exchange grant “The Logical Dynamics of Information Exchange in Social Networks” (2014–2016, Alexandru Baltag & Fenrong Liu), with 14 researchers
2. "Model-Checking Dynamic Epistemic Logic" (2014–2017, Fenrong Liu & Kaile Su, Johan van Benthem, Jan van Eijck), National Natural Science Foundation of China

History of Logic in China

Goal: Bring together Chinese and international researchers working on the history of logic in China, broadly conceived, centered around the creation of a Handbook of the History of Logical Thought in China, and related events.

Core group: Peter van Emde Boas (ILLC), Chad Hansen (Hong Kong), Christoph Harbsmeier (Oslo), Fenrong Liu (Tsinghua), Jeremy Seligman (Auckland), Jincheng Zhai (Nankai).

Key publications:

Highlight: Two workshops in 2016, focusing on the translation of handbook chapters, English into Chinese, and vice versa. Authors met translators, with fruitful interactions.
  Feb 25-26: Workshop on Logic, Language and Translation
  July 2: The History of Logical Thought in China: Glossaries and Translation

Logic, Language and Philosophy

Goal: Exploring new interfaces between language, logic, philosophy, and culture.

Core group: Martin Stokhof (ILLC), Frank Veltman (ILLC), Lu Wang (Tsinghua), Fengkui Ju (Beijing Normal University), Chongli Zou (CASS), Dag Westerståhl (Stockholm).

Key publications:


*Highlight*: Tsinghua Workshop on Logical Methods in Philosophy and Linguistics: Scope and Limits, October 29, Tsinghua University, [http://tsinghualogic.net/JRC/?p=859](http://tsinghualogic.net/JRC/?p=859). This event was devoted to exchange and discussion of views. Talks: Johan van Bentham (Logic and philosophy, an empirical chronicle of comings and goings), Wang Lu (Being and Truth: two ways in the research of philosophy), Ahti-Veikko Pietarinen (Peirce's Philosophy of Logic), Zhou Yuncheng (Towards a semantics of know-that), Wang Yanjing (A Logic of Knowing Why), Martin Stokhof (Logic in philosophy: an instrumental view)

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**Further research activities**

Junhua Yu's paper 'Instantial Neighborhood Logic' with Johan van Benthem, Nick Bezhanishvili and Sebastian Enqvist was accepted for publication in the *Review of Symbolic Logic*. Yu presented "Instantial neighborhood logic with its tableau system" at the Third International Workshop on Proof Theory, Modal Logic and Reflection Principles, Sep. 5–9, Tbilisi State University, Georgia.

Jan van Eijck and Fengkui Ju started a joint project on deontic logic and legal reasoning. Fenrong Liu spent her sabbatical at Stanford University starting August 2016, as a Berggruen Fellow at the Center for Advanced Study in the Behavioral Sciences on the topic of reasoning and its social and intercultural dimensions.

**APPOINTMENTS**

New appointments in 2016 that help define the JRC.

- Fenrong Liu, Changjiang Distinguished Professor, Chinese Ministry of Education
- Jeremy Seligman, Weilun Professor, Tsinghua
- Jin Yuelin Chair Distinguished Professorship, a newly created position at Tsinghua, first holders Johan van Benthem, Martin Stokhof, Dag Westerståhl, and Jeremy Seligman. This team will start work in 2017, teaching courses and seminars, supervising students, and carrying out research at Tsinghua.
VISITORS
The centre hosts international visitors on a regular basis who engage in joint research, participate in centre events, and may conduct intensive courses and seminars for graduate students. The following list contains international visitors at both sites in 2016.

Tsinghua
Feb, Jeremy Seligman (University of Auckland), HOLIC project
Apr, Chenwei Shi (University of Amsterdam), JRC Ph.D student
May-Jun: Johan van Benthem (UvA, Stanford), Changjiang Professor
May-Oct: Jeremy Seligman (University of Auckland), Weilun Professor
Jul: Sonja Smets (University of Amsterdam), KNAW Joint Project
Jul: Alexandru Baltag (University of Amsterdam), KNAW Joint Project
Jul: Chenwei Shi (The University of Amsterdam), KNAW Joint Project
Aug: Olivier Roy (University of Bayreuth), Joint Research
Aug: Huimin Dong (University of Bayreuth), Joint Research
Aug: Albert Anglberger (University of Bayreuth), Joint Research
Aug: Dominik Klein (University of Bayreuth and Bamberg), Joint Research
Oct: Johan van Benthem (University of Amsterdam), Changjiang Professor
Sep-Oct: Martin Stokhof (University of Amsterdam), Weilun Professor
Nov-Dec: Marvin Gattinger (University of Amsterdam), JRC Ph.D student

ILLC UvA
Jan: Fenrong Liu (Tsinghua University), Amsterdam China Logic Chair
Mar: Fenrong Liu (Tsinghua University), Amsterdam China Logic Chair
Sep 2016 – Sep 2017: Fengkui Ju (Beijing Normal University), visiting scholar
Sep 2016 – Jul 2018: Xiaoxuan Fu (Tsinghua University), visiting Ph.D student
Sep 2016 – Jul 2019: Kaibo Xie (Tsinghua University), CSC-funded Ph.D student

EDUCATION
Graduate program. The JRC now has a graduate program with four official Ph.D. students enrolled, co-supervised at both sites, plus a few more affiliate students:

- Chenwei Shi (logic and epistemology)
- Malvin Gattinger (computational aspects of dynamic-epistemic logic)
- Xiaoxuan Fu (temporal logic)
- Chong Wang (language and philosophy)
- Yibin Dai (language and philosophy)
- Kun Xing (computational linguistics)
- Yu Chen (intelligence agency)

Seminars. The JRC organized several short-term advanced tutorials at Tsinghua.
Apr: Public announcement and question-answer games (Hans van Ditmarsch, Nancy)
Jun: Three lectures in model theory (Jouko Vaananen, ILLC and Helsinki)
Oct: Connecting proof theory and semantics (Johan van Benthem, ILLC and Stanford)

The JRC continued its activities as an official hub in the international on-line education project Logic in Action, see the updated website http://www.logicinaction.org/
SCIENTIFIC EVENTS

Workshops
Feb 25-26: Workshop on Logic, Language and Translation
Jul 2: The History of Logical Thought in China: Glossaries and Translation
Aug 8-12: Workshop Tsinghua Meets Bayreuth
Oct 29: Logical Methods in Philosophy and Linguistics: Scope and Limits

Special event: Tsinghua-Bayreuth Logic Workshop, Aug 8-12, 2016
The organizers Fenrong Liu and Olivier Roy chose a structure maximizing interaction, with intensive work sessions, resulting in 3 new collaborative projects.

PUBLICATIONS

The following publications by members and associates demonstrate the JRC’s activities.

Books

Articles
15. Johan van Benthem. Logic and Epistemology, interview with Chinese colleagues, Philosophical Analysis 7:6, Shanghai Academy of Social Sciences, 140–154, 2016
23. Xiaowei Huang, Ji Ruan, Qingliang Chen & Kaile Su. Normative Multiagent Systems: The Dynamic Generalization. IJCAI 2016: 1123-1129
24. Xiaowei Huang, Qingliang Chen & Kaile Su. Strengthening Agents Strategic Ability with Communication. AAAI 2016: 2509-2515

**DISSEMINATION PROJECTS**


*Short textbooks* A new Springer series “Short Textbooks in Logic” has started. Editors-in-chief: Fenrong Liu, Hiroakira Ono and Jeremy Seligman. Aim: to present readers worldwide with clear and concise textbooks, 120 pages average. Topics ranges from mathematical and philosophical logic to logical methods applied to computer science.
Translations  We are also active in making works in English available to Chinese readers. Some past and current translation projects include:

- *Door to Logic* [http://tsinghualogic.net/related-events/workshop-on-door-to-logic-finale/](http://tsinghualogic.net/related-events/workshop-on-door-to-logic-finale/)
- Johan van Benthem, *Logic in Games*, The MIT Press, 2014. Translators: Jidong Li (Nankai University), Jianying Cui (Sun Yat-sen University), to be published with the Chinese Social Sciences Press.